

## **AMENDMENT TO THE CLAIMS**

### **Listing of Claims:**

1. **(Original)** A radio apparatus comprising:  
a receiving unit for receiving a signal;  
a measuring unit for measuring a quality of the received signal;  
a predicting unit for predicting a quality of a signal to be received based on the quality of the received signal being previously measured by the measuring unit; and  
a judging unit for judging a probability of continuation of a communication based on the predicted quality of the signal to be received and the measured quality of the received signal.
2. **(Original)** The radio apparatus according to claim 1, wherein the quality of the received signal and the quality of the signal to be received are characterized by a carrier-to-interference power ratio.
3. **(Currently Amended):** A radio apparatus comprising:  
a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;  
a measuring unit for measuring a quality of the received signal;  
an estimating unit for deriving a first prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the quality of the received signal being previously measured by the measuring unit;  
an index calculating unit for calculating an index value based on the newly measured quality of the received signal at next timing;

a calculating unit for calculating a second prediction value of the communication rate based on the index value and the first prediction value; and

a notifying unit for notifying ~~the index value and~~ the second prediction value.

**4. (Original)** The radio apparatus according to claim 3, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**5. (Currently Amended)** A radio apparatus comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;

a measuring unit for measuring a quality of the received signal;

an estimating unit for deriving a first prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the quality of the received signal being previously measured by the measuring unit;

a detecting unit for detecting a power value based on the received signal;

a power index calculating unit for calculating an index value based on a preset reference value and the detected power value;

a calculating unit for calculating a second prediction value of the communication rate based on the index value and the first prediction value; and

a notifying unit for notifying ~~the index value and~~ the second prediction value.

**6. (Original)** The radio apparatus according to claim 5, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**7. (Currently Amended)** A radio apparatus comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;

a measuring unit for measuring a quality of the received signal;

an estimating unit for deriving a first prediction value of a communication rate of a signal being transmitted from the base station apparatus in future, based on the quality of the received signal being previously measured by the measuring unit;

an index calculating unit for calculating a first index value based on the measured quality of the received signal;

a detecting unit for detecting a power value based on the received signal;

a power index calculating unit for calculating a second index value based on a preset reference value and the detected power value;

a calculating unit for calculating a second prediction value of the communication rate based on the second index value and the first prediction value; and

a notifying unit for notifying ~~the first index value and~~ the second prediction value.

**8. (Original)** The radio apparatus according to claim 7, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**9. (Currently Amended)** A radio apparatus comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;

a measuring unit for measuring a quality of the received signal;

an estimating unit for deriving a first prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the quality of the received signal being previously measured by the measuring unit;

an index calculating unit for calculating a first index value based on the measured quality of the received signal;

a detecting unit for detecting a power value based on the received signal;

a power index calculating unit for calculating a second index value based on a preset reference value and the detected power value;

a calculating unit for calculating a second prediction value of the communication rate based on the first index value and the first prediction value; and

a notifying unit for notifying ~~the second index value and~~ the second prediction value.

**10. (Original)** The radio apparatus according to claim 9, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**11. (Original)** The radio apparatus according to claim 5,  
wherein the detecting unit detects a reception power value of the received signal as the power value, and  
the power index calculating unit sets a minimum receivable power value as the reference value and calculates the index value based on the minimum receivable power value and the reception power value.

**12. (Original)** The radio apparatus according to claim 7,

wherein the detecting unit detects a reception power value of the received signal as the power value, and

the power index calculating unit sets a minimum receivable power value as the reference value and calculates the index value based on the minimum receivable power value and the reception power value.

**13. (Original)** The radio apparatus according to claim 9,

wherein the detecting unit detects a reception power value of the received signal as the power value, and

the power index calculating unit sets a minimum receivable power value as the reference value and calculates the index value based on the minimum receivable power value and the reception power value.

**14. (Currently Amended)** The radio apparatus according to claim 5,

wherein the detecting unit detects a transmission power value as the power value, which corresponds to ~~from~~ an instruction information included in the received signal and is transmitted at next timing, and

the power index calculating unit sets a maximum transmissible power value as the reference value and calculates the index value based on the maximum transmissible power value and the transmission power value.

**15. (Currently Amended)** The radio apparatus according to claim 7,

wherein the detecting unit detects a transmission power value as the power value, which corresponds to ~~from~~ an instruction information included in the received signal, and is transmitted at next timing, and

the power index calculating unit sets a maximum transmissible power value as the reference value and calculates the index value based on the maximum transmissible power value and the transmission power value.

**16. (Currently Amended)** The radio apparatus according to claim 9,

wherein the detecting unit detects a transmission power value as the power value, which corresponds to ~~from~~ an instruction information included in the received signal, and is transmitted at next timing, and

the power index calculating unit sets a maximum transmissible power value as the reference value and calculates the index value based on the maximum transmissible power value and the transmission power value.

**17. (Currently Amended)** A radio apparatus comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;

a reception power detecting unit for detecting a reception power value of the received signal;

a first index calculating unit for calculating a first index value based on the detected reception power value and a minimum receivable power value;

a transmission power detecting unit for detecting a transmission power value, which corresponds to ~~from~~ an instruction information included in the received signal and is transmitted at next timing;

a second index calculating unit for calculating a second index value based on the detected transmission power value and a maximum transmissible power value;

a measuring unit for measuring a quality of the received signal;

an estimating unit for deriving a first prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the measured quality of the received signal;

a calculating unit for calculating a second prediction value of the communication rate based on the first index value and the first prediction value; and

a notifying unit for notifying ~~the second index value and~~ the second prediction value.

**18. (Original)** The radio apparatus according to claim 17, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**19. (Currently Amended)** A radio apparatus by comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;

a reception power detecting unit for detecting a reception power value of the received signal;

a first index calculating unit for calculating a first index value based on the detected reception power value and a minimum receivable power value;

a transmission power detecting unit for detecting a transmission power value ~~from~~ which corresponds to an instruction information included in the received signal and is transmitted at next timing;

a second index calculating unit for calculating a second index value based on the detected transmission power value and a maximum transmissible power value;

a measuring unit for measuring a quality of the received signal;

an estimating unit for deriving a first prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the measured quality of the received signal;

a calculating unit for calculating a second prediction value of the communication rate based on the second index value and the first prediction value; and

a notifying unit for notifying the first index value and the second prediction value.

**20. (Original)**      The radio apparatus according to claim 19, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**21. (Original)**      A radio apparatus by comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus;

a measuring unit for measuring a quality of the received signal;

a detecting unit for detecting a power value based on the received signal;

a calculating unit for calculating a correction value based on a preset reference value and the detected power value; and



a correcting unit for correcting the measured quality of the received signal by using the calculated correction value.

**22. (Currently Amended)** The radio apparatus according to claim 21, wherein the signal transmitted from the base station apparatus includes an instruction information relating to a transmission power when the radio apparatus transmits a signal to the base station apparatus;

the detecting unit detects a transmission power value of a signal to be transmitted as a predetermined power value, which corresponds to ~~from~~ the instruction information relating to the transmission power included in the received signal and is transmitted at next timing; and

the calculating unit sets a maximum transmissible power value as the reference value and calculates the correction value based on the maximum transmissible power value and the transmission power value of the signal to be transmitted.

**23. (Original)** The radio apparatus according to claim 21, wherein the detecting unit detects a reception power value of the received signal as the predetermined power value; and

the calculating unit sets a minimum receivable power value as the reference value and calculates the correction value based on the minimum receivable power value and the reception power value of the received signal.

**24. (Original)** The radio apparatus according to claim 21, wherein the calculating unit sets the correction value to zero if the detected power value is outside of a predetermined range.

**25. (Original)** The radio apparatus according to claim 21,

wherein a communication rate of the signal transmitted from the base station apparatus is variable,

and wherein the radio apparatus further comprises

an estimating unit for deriving a prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the corrected quality of the received signal; and

a notifying unit for notifying a user of the prediction value.

**26. (Original)** The radio apparatus according to claim 21,

wherein a communication rate of the signal transmitted from the base station apparatus is variable,

and wherein the radio apparatus further comprises:

an estimating unit for deriving a prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the corrected quality of the received signal; and

an output unit for outputting the prediction value.

**27. (Original)** The radio apparatus according to claim 21, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.

**28. (Original)** A radio apparatus comprising:

a receiving unit for receiving a signal transmitted from a base station apparatus at a variable communication rate;

an interference measuring unit for measuring a quality of the received signal;

an estimating unit for deriving a prediction value of a communication rate of a signal being transmitted from the base station apparatus in the future, based on the measured quality of the received signal;

a storing unit for storing the prediction value;

a rate measuring unit for measuring an actual communication rate value of the received signal;

a calculating unit for calculating a signal occupation ratio based on the measured actual communication rate value and a prediction value corresponding to the measured actual communication rate value among prediction values stored in the storing unit; and

a correcting unit for correcting the prediction value by using the signal occupation ratio.

**29. (Original)** The radio apparatus according to claim 28, wherein the calculating unit calculates the signal occupation ratio by performing statistical processing to determine a ratio between the measured actual communication rate value and a prediction value corresponding to the measured actual communication rate value among prediction values stored in the storing unit in a past predetermined period.

**30. (Original)** The radio apparatus according to claim 28, wherein the correcting unit corrects the prediction value by multiplying the prediction value by the signal occupation ratio.

**31. (Original)**      The radio apparatus according to claim 28, further comprising a notifying unit for notifying a user of the corrected prediction value.

**32. (Original)**      The radio apparatus according to claim 28, further comprising an output unit for outputting the corrected prediction value.

**33. (Original)**      The radio apparatus according to claim 28, wherein the quality of the received signal is characterized by a carrier-to-interference power ratio.